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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,895

11/21/2003

Monique Helene Verheije

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EXAMINER

HILL, MYRON G

ART UNIT

PAPER NUMBER

1648

MAIL DATE

DELIVERY MODE

05/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/719,895

Applicant(s)

VERHEIJE, MONIQUE HELENE

Examiner

Myron G. Hill

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group I in the reply filed on 2/12/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 13 and 16-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 1-12 are under consideration.

### ***Priority***

This application is a CON of PCT/NL02/00314 05/16/2002 but is not a CON of 09/874,626 06/05/2001 which is a CON of 09/297,535. The current application does not share any common inventors with the prior US applications is not entitled to priority to them. Thus the earliest US filing date for priority is 05/16/2002.

A copy of the priority document EP 01201921.2 has been obtained and placed in the file.

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***Information Disclosure Statement***

No IDS papers are in the file.

***Oath/Declaration***

The declaration filed reflects the priority as indicated above.

***Claim Objections***

Claims 8-10 are objected to because of the following informalities: Claim 8 fails to refer to a claim (the claim number is missing). Appropriate correction is required. Because it is not clear what claim claim 8 refers to, claims 8-10 are not further treated.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4, 6, 11, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 4, and 6 recite the limitation "replicon" in line 1. There is insufficient antecedent basis for this limitation in the claim. This also affects claims 3, 11, and 12 because they depend from claim 2.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Meulenberg *et al.* (WO98/18933).

Meulenberg *et al.* teach an infectious clone of an arterivirus having at least some of its original ORF-7 deleted, in that there is substituted ORF 7 and fragments of ORF 7 in an infectious clone that can contain a heterologous nucleic acid from a (page 7, lines 21-36, and page 27, lines 27-36). Also, taught are replicons for use in vaccines (the paragraph on page 28).

The limitation in claim 5, "functional kissing loop interaction", is an inherent feature of the virus. Inherent properties need not be recognized in the prior art. Previously unknown properties do not make an old compound patentable. The mutations that would have deleted the "functional kissing loop interaction" would have not functioned as described by Meulenberg *et al.* as infectious clones or replicons and thus been outside of the scope of the matter described in the cited art.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meulenberg *et al.* (WO98/18933).

The claims are drawn to a C-terminal truncated ORF-7 and the mutation does not effect viability of the virus.

Meulenberg *et al.* is discussed above and additionally teaches that all PRRSV transcripts share a common 5' end and this leader primed transcription is a complex process (page 27, lines 10-16).

Meulenberg *et al.* does not teach C-terminal truncation of ORF-7.

One of ordinary skill in the art at the time of invention would have been motivated to make the fragments of ORF-7 as taught by Meulenberg *et al.* by deletions at the 3' end of the nucleic acid (which would make C-terminal protein deletions) to avoid altering the complex leader primed synthesis as taught by Meulenberg *et al.*

Thus, it would be prima facie obvious to make C-terminal deletions of ORF-7 with the expectation of success knowing the teachings of Meulenberg *et al.*

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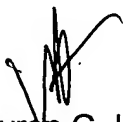
**Conclusion**

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myron G. Hill whose telephone number is 571-272-0901. The examiner can normally be reached on 8:30 am-5 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Myron G. Hill  
Patent Examiner  
4/25/07

  
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